

DEPARTMENT OF DEFENSE
DIRECTIVES SYSTEM TRANSMITTAL

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5000.2-R Change 1	December 13, 1996	5000 Series
ATTACHMENTS		
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INSTRUCTIONS FOR RECIPIENTS

The following page changes to DoD 5000.2-R, "Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs," March 15, 1996, are authorized:

PAGE CHANGES

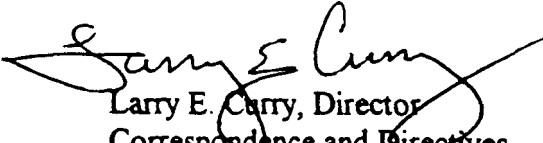
Remove: Pages 15 and 16

Insert: Attached replacement pages

Changes appear on page 16 in Part 3 and are indicated by marginal asterisks.

EFFECTIVE DATE

The **above** changes are effective immediately.


Larry E. Curry, Director
Correspondence and Directives

WHEN PRESCRIBED ACTION HAS BEEN TAKEN, THIS TRANSMITTAL SHOULD BE FILED WITH THE BASIC DOCUMENT

Test and evaluation planning shall begin in Phase O, Concept Exploration. Both developmental and operational testers shall be involved early to ensure that the test program for the most promising alternative can support the acquisition strategy and to ensure the harmonization of objectives, thresholds, and measures of effectiveness (MOES) in the ORD and TEMP. Test and evaluation planning shall address MOES and measures of performance (MOPS) with appropriate quantitative criteria, test event or scenario description, resource requirements (e.g., special instrumentation, test articles, validated threat targets, validated threat simulators and validated threat simulations, actual threat systems or surrogates, and personnel), and identify test limitations.

1. Test planning, at a minimum, shall address all system components (hardware, software and human interfaces) that are critical to the achievement and demonstration of contract technical performance specifications and operational effectiveness and suitability requirements from the ORD.
2. Quantitative criteria shall be phased so as to provide substantive evidence for analysis of hardware, software and system maturity and readiness to proceed through the acquisition process. Linkage shall exist among the various MOES and MOPS used in the analysis of alternatives or ORD, and test and evaluation; in particular, the MOEs, MOPS, and criteria in the ORD, the analysis of alternatives, the TEMP and the APB shall be consistent.
3. Test and evaluation planning must provide for completion of Initial Operational Test and Evaluation (IOT&E) and Live Fire Test and Evaluation (LFT&E), as required, before entering full-rate production.
4. Sufficient testing must be conducted on commercial and nondevelopmental items to ensure performance, operational effectiveness, and operational suitability for the military application. However, the test program shall be tailored to recognize commercial testing and experience.
5. Testing shall be planned and conducted to take full advantage of existing investment in DoD ranges, facilities, and other resources, wherever practical, unless otherwise justified in the TEMP. DoDD 3200.1 1³⁷ identifies the major ranges and test facilities. In addition, the potential environmental impacts associated with testing must be considered (42 USC 14321-4347³⁸ and EO 121143).
6. Early testing of prototypes in Phase 1, Program Definition and Risk Reduction, and early operational assessments shall be emphasized to assist in identifying risks.
7. Modeling and simulation shall be an integral part of test and evaluation planning.

A combined developmental test and operational test (DT/OT) approach is encouraged to achieve time and cost savings. The combined approach shall not compromise either developmental or operational test objectives. A final independent phase of operational test and evaluation shall be required for beyond low-rate initial production (LRIP) decisions.

The Director, Operational Test and Evaluation (DOT&E) and the Director, Test, Systems Engineering and Evaluation (DTSE&E) shall be granted full and timely access to all available developmental, operational and live fire test and evaluation information.

3.4.2 Developmental Test and Evaluation

Developmental test and evaluation (DT&E) programs shall:

1. Identify potential operational and technological capabilities and limitations of the alternative concepts and design options being pursued;
2. Support the identification of cost-performance trade-offs by providing analyses of the capabilities and limitations of the alternative concepts and design options being pursued;
3. Support the identification and description of design technical risks;
4. Assess progress toward meeting Critical Operational Issues, mitigation of acquisition technical risk, achievement of manufacturing process requirements and system maturity;
5. Assess validity of assumptions and conclusions from the analysis of alternatives;
6. Provide data and analysis in support of the decision to certify the system ready for operational test and evaluation; and,
7. In the case of automated information systems, support an information systems security certification prior to processing classified or sensitive data and ensure a standards conformance certification.

The DTS&E shall: (1) assess compliance with the systems engineering practices and developmental test and evaluation policies and procedures of this Regulation, and (2) ensure that threat target and simulator acquisitions meet developmental and operational test evaluation requirements, and perform independent oversight of Component validation processes.

The Director, DISA, through the use of the Joint Interoperability Test Command (JITC) shall certify to the developmental and operational testing organizations and to the Chairman of the Joint Chiefs of Staff that C4I systems and equipment meet the applicable requirements for compatibility, interoperability, and integration based on certification testing.

3.4.3 Certification of Readiness for Operational Test and Evaluation.

The developing agency shall prepare a DT&E Report, and formally certify that the system is ready for the next dedicated phase of operational test and evaluation to be conducted by the DoD Component operational test activity. The developing agency shall establish maturity criteria and performance exit criteria necessary for certification for operational test. In support of this, risk management measures and indicators, with associated thresholds, which address performance and technical adequacy of both hardware and software shall be defined and used on each program. A mission impact analysis of criteria and thresholds that have not been met shall be completed prior to certification for operational tests.

3.4.4 Modeling and Simulation